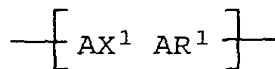


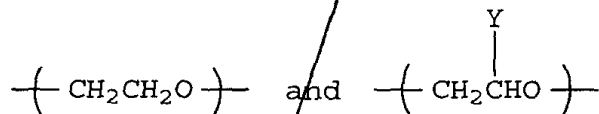
A¹
 sub.
 B¹

--10. A resin composition for ink jet recording comprising (a) a major component of a water-absorbing polymer compound represented by the formula (I),

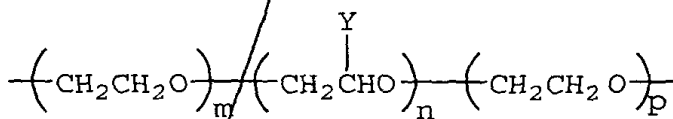


(I)

wherein A consists of



with a manner of linkage therebetween being



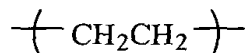
wherein m, n, and p represent integers greater than or equal to 1, and a weight ratio calculated on the basis of each recurrence number m, n, and p predetermined to be: $44 \times (m+p) / (\text{molecular weight of the unit of the alkylene oxide having more than or equal to four carbon atoms}) \times n = 94/6 \text{ to } 80/20$,

and the weight ratio calculated on the basis of each recurrence number m and p, $p/(m+p)$ is predetermined to be more than or equal to 50 percent by weight;

A1 Sub
cont. B1
cont.

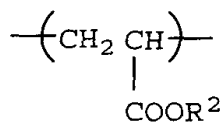
Y represents a hydrocarbon group having two or more carbon atoms; X¹ represents a residue of an organic compound having two active hydrogen groups; and R¹ represents a residue of a dicarboxylic acid compound; and (b) a cationic polymer compound.

11. The resin composition of claim 10 wherein (b) is a cationic polymer compound having a weight average molecular weight ranging between 1,000 and 50,000 with a linear and irregular arrangement, comprising 65 mol% to 99 mol% of an ethylene structural unit represented by formula (II),



(II)

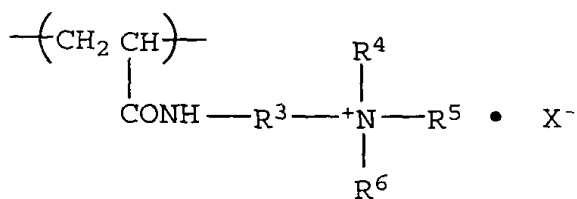
less than or equal to 15 mol% of an acrylate structural unit represented by formula (III),



(III)

wherein R² represents an alkyl group having 1 to 4 carbon atoms, and 1 mol% to 35 mol% of an acrylamide structural unit represented by formula (IV),

a1
cont.



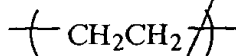
(IV)

wherein R³ represents an alkylene group having 2 to 8 carbon atoms, R⁴ and R⁵, respectively, represent an alkyl group having 1 to 4 carbon atoms, R⁶ represents an alkyl group having 1 to 12 carbon atoms, an aryl alkyl group having 7 to 12 carbon atoms, or an alicyclic alkyl group having 6 to 12 carbon atoms, and X⁻ represents a halogen ion, CH₃OSO₃⁻, or C₂H₅OSO₃⁻.

TOP SECRET

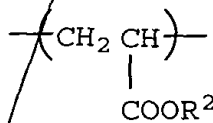
Q1
Cont. Sub 7
Pg 2

12. The resin composition of claim 10 wherein (b) is a cationic polymer compound having a weight average molecular weight ranging between 1,000 and 50,000 with a linear and irregular arrangement, comprising 65 mol% to 99 mol% of an ethylene structural unit represented by formula (II),



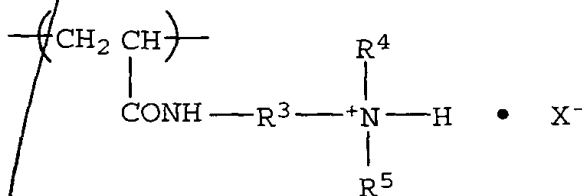
(II)

less than or equal to 15 mol% of an acrylate structural unit represented by formula (III),



(III)

wherein R^2 represents an alkyl group having 1 to 4 carbon atoms, and 1 mol% to 35 mol% of an acrylamide structural unit represented by formula (V):



(V)

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Q1 Sub.
Cont. B2
cont.

wherein R^3 represents an alkylene group having 2 to 8 carbon atoms, R^4 and R^5 , respectively, represent an alkyl group having 1 to 4 carbon atoms, and X^- represents a halogen ion, $CH_3OSO_3^-$ or $C_2H_5OSO_3^-$.

13. The resin composition of claim 10 wherein a mixing ratio by weight of the water-absorbing polymer compound (a) and the cationic polymer compound (b) is between 50/50 and 99/1.

14. The resin composition of claim 10 further comprising (c) a cationic or nonionic surface active agent.

15. The resin composition of claim 14 wherein an amount of the cationic or nonionic surface active agent (c) is from 1% by weight to 10% by weight.

16. An ink jet recording sheet comprising a substrate layer and an ink-receiving layer that is overlaid said substrate layer, wherein said ink-receiving layer comprises the resin composition according to any of claims 10 through 15.

17. A method of ink jet recording using an ink jet recording sheet according of claim 16, comprising the step of adsorbing small droplets of a water-based color ink applied to the ink-receiving layer.

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Sub. 7
B3

a1
Cent.
Jacks
B4

7

18. A method of producing an ink jet recording sheet comprising the steps of extruding a resin composition that constitutes a substrate layer into a sheet form, while extruding a resin composition for ink jet recording sheet according to any of claims (9) through 15 into a sheet form concurrently with the substrate layer, and forming layers from both of said resin compositions.

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